

Datasheet: PMP04Z

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|----------------------|---|
| Description: | PURIFIED MOUSE NERVE GROWTH FACTOR 2.5S |
| Name: | NERVE GROWTH FACTOR 2.5S |
| Other names: | NGF BETA |
| Format: | Purified |
| Product Type: | Purified Protein |
| Quantity: | 1 mg |

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

| | Yes | No | Not Determined | Suggested Dilution |
|-------------------|-----|----|----------------|--------------------|
| Functional Assays | ▪ | | | |

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

| | |
|---------------------------------|---|
| Target Species | Mouse |
| Species Cross Reactivity | <p>Reacts with: Rat</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p> |
| Product Form | Purified natural murine nerve growth factor - lyophilized |
| Reconstitution | Reconstitute with 1.0 ml distilled water. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. |
| Preparation | Murine nerve growth factor is prepared from the submaxillary glands of mice by sephadex and subsequent cellulose chromatography (Bocchini and Angeletti 1969). |
| Buffer Solution | Phosphate buffered saline |
| Preservative | None present |

Stabilisers

Approx. Protein Concentrations 1.0mg/ml

External Database Links

UniProt:
[P01139](#) [Related reagents](#)

Entrez Gene:
[18049](#) Ngf [Related reagents](#)

Synonyms Ngfb

Product Information **Purified Mouse Nerve Growth Factor 2.5S** is prepared from mouse submaxillary glands ([Bocchini and Angeletti 1969](#)) and has an apparent molecular mass of ~30 kDa. Nerve growth factor has a variety of effects on the growth and development of sensory and sympathetic neurons. In the peripheral nervous system, NGF is required for the development and maintenance of sympathetic nerve cells that use catecholamine neurotransmitters.

Purified Mouse Nerve Growth Factor 2.5S has been used to demonstrate the importance of NGF in regulation of neuronal function through the up-regulation of the transcription factor NFAT (Nuclear Factor of Activated T-cells) via activation of the PI3K/Akt pathway ([Kim et al. 2014](#)).

Protein Molecular Weight Approximately 30 kDa

Purity >98% by SDS PAGE

References

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16. Borland, H. *et al.* (2022) α -synuclein buildup is alleviated via ESCRT-dependent endosomal degradation brought about by p38MAPK inhibition in cells expressing p25 α . [J Biol Chem. 298 \(11\): 102531.](#)
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Further Reading 1. Bocchini V & Angeletti PU (1969) The nerve growth factor: purification as a 30,000-molecular-weight protein. [Proc Natl Acad Sci U S A. 64 \(2\): 787-94.](#)

Storage Prior to reconstitution store at +4°C. Following reconstitution store at -20°C.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 3 months from date of reconstitution

Health And Safety Information Material Safety Datasheet documentation #10302 available at: <https://www.bio-rad-antibodies.com/SDS/PMP04Z>
10302

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M345910:190125'

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